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METHOD FOR FORMING A FASCIA ASSEMBLYFOR A MOTOR VEHICLE

> This application is a 371 of PCT/CA00/00954 filed 08/16/2000, which claims benefit of Provisional 60/48,692, filed 08/16/1999.

Field of the Invention

- 5 The present invention relates to a method for forming a fascia assembly for a front or rear end of a motor vehicle. In particular, the present invention relates to a method wherein first and second fascia assembly components are fastened together by a molded interlock.

10 **Background of the Invention**

When manufacturing and assembling fascia assemblies for the front or rear end of a motor vehicle, the exterior fascia panel is usually molded by itself and then connected to other fascia assembly components, such as a bumper beam or a grill and headlamp carrier panel, by fasteners such as threaded bolts. To connect the fascia panel to one of the other

15 fascia assembly components in such a manner, the panel and the component are typically molded separately and then brought to an assembly station where bores are drilled into the panel and the component. Then, the drilled bores are aligned and bolts are inserted into the aligned bores and securely tightened with nuts to fasten the panel and component together.

- 20 This conventional approach has two primary drawbacks. First, the conventional approach is relatively inefficient. Specifically, molding the panel and component separately and then bringing them together at an assembly station for fastening is time consuming and occupies manpower and other resources that could be eliminated or more efficiently used elsewhere.

- 25 The second drawback is that variations in dimensional tolerances between the panel and the component can make it difficult to properly fasten them together using a simple nut/bolt fastening arrangement. That is, when there is misalignment between the holes in the panel and the component, a fastener cannot be easily inserted through the holes. Instead, the holes on either the panel or the component must be widened by further drilling
- 30 or the like to ensure that the bolts can pass through the holes. These widened holes are undesirable because, even though they allow the panel and the component to be fastened together, they also allow for relative movement between the panel and the component. This can create visible misalignments when the component is of the kind that is designed to support an exterior structure (e.g., the grill or the headlamps) in a particular orientation
- 35 with respect to the fascia panel. Consequently, there exists a need for an improved method of assembling a front or rear end fascia assembly that overcomes these inefficiency and tolerance problems associated with the conventional method.